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A STUDY OF THE PHYSICAL EDUCATION PROGRAM IN THE ELEMENTARY SCHOOLS OF MASSACHUSETTS COMMUNITIES BETWEEN 5,000 AND 50,000 IN POPULATION

SUBMITTED BY

Shirley Evelyn Simpson

B.S. in ED. Tufts College, 1943

in Partial Fulfilment of The Requirements of

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CHAPTER I

BACKGROUND OF STUDY

STATEMENT OF PROBLEM

The purpose of this study is to ascertain the status of the Physical Education Program in the Elementary Schools of Massachusetts. A number of studies have been carried on concerning the interests and problems of the Secondary School Program, but it is felt that too little has been done for the Elementary Grades. For this reason, this study should provide an adequate picture of the Elementary School Physical Education problem. With a knowledge of the present program, a recognition of its lacks, and an understanding of the characteristics of a good Physical Education program for Elementary Schools, the standards in this phase of our total educational program could be substantially and successfully raised.

PROCEDURE

As the Physical Education program is dependent upon its physical plant, equipment, and staff, it was necessary to construct a questionnaire of some scope, to acquire and assemble enough data for an adequate study.

Basis for Instrument Selection. The questionnaire method was selected in order to contact more schools than could be reached by means of personal interview. Those who received, but did not return the form, have at least read the covering letter and the title of the survey, and so have given thought to their own program.

Additional Sources of Information. Several personal interviews were conducted, in conjunction with the survey, in order to make a check of,

and reliability for the study.

SCOPE

The scope of the study includes a proportionate number of Elementary Schools in Massachusetts communities between 5,000 and 50,000 in population.

The study was concerned with the physical plant and staff, as a background for the establishment of a program of Physical Education.

METHOD OF PROCEDURE

Three hundred and sixty-three postal cards were sent to schools selected at random by means of a random number list. These schools were included in the one hundred sixteen Massachusetts communities in the 5,000 to 50,000 population range. The cards were sent according to the number of schools in each population group. Two were sent to the smallest group, in order that some response from each community might be forthcoming. 194 of the preliminary cards were returned from 92 communities. Of these, 183 indicated their willingness to complete a questionnaire, 6 did not answer the question, 3 put a question mark, and 2 answered in the negative. The cards returned were 54% of those sent and the number of communities responding was 79%.

As a result of the preliminary card survey, 203 questionnaires were sent. Of these, 192 were to those responding to the postal card request either affirmatively, or by no answer at all. The remainder were sent to four communities, whose Supervisor of Physical Education volunteered to answer the questionnaire.

The questionnaire included the physical plant, both indoors and out; the equipment available; the training and experience of the teacher of physical Education; the pupil population of the school; the tax-rate of

the community; and the time allotment for Physical Education, as well as those activities taught frequently, often, seldom and never.

A personal visit was made to four communities in the vicinity of Boston, as a validation and reliability check.

DEFINITION OF TERMS USED

The terms used are known and employed by Physical Educators, and the definitions which follow are based upon those given by Neilson and Van Hagen[1].

Group Games are contests in which the "big muscle" groups are used in natural activities, such as running, jumping, climbing, throwing, chasing and striking. The use of these muscles has a great effect upon the growth and strengthening of the organs, the heart and lungs; and the development of the systems, digestive and others, all resulting in improved health and increased vigor.

Individual Games are activities in which the individual pits himself against others; or against his own past experiences and responses. They serve to provide training in game elements which can be practiced individually, and are the ladder which the child climbs to achieve success in games of higher organization and skill.

Relay Races are composed of individual games as a group or team situation. They serve as instruments to develop cooperation, interdependance, competition, and individual and group skill.

Rhythmic Activities provide the child with any number of benefits. These include movement to different patterns of rhythm, the execution of the

1 Neilson, N.P., and Van Hagen, W., Physical Education for Elementary Schools, A.S. Barnes & Co., New York, 1939, pp.27-47.

elementary forms of locomotion to accompaniment, the incorporation of the elemental figures and forms into floor patterns and small dances. They are responses to rhythm and music, which will be carried over into adolescent and adult life. Rhythmical activities provide not only complete and thorough exercises; a knowledge of rhythm, beat and tone; but serves to release tensions, to relax into abandoned movement, free of the sharp, angular movements of ordinary play.

Mimetics are valuable in that through their use it is possible to teach well-known activities without the usual equipment. They include a sense of the imaginary, which all elementary school children enjoy.

Stunts are athletic events which are designed as challenges to the children. Some stunts call for the development of courage and the finer muscle groups, and some which call for confidence in one's self, as well as in one's companions. They are free to do, fun to do, and can be carried over to the home and leisure time moments.

Apparatus Activity is dependent upon equipment of various sorts. Work on apparatus calls for the great strength and courage, and unless carefully controlled and supervised might become a dangerous activity. As there are so many other methods by which strength and courage can be developed, apparatus activities are not taught very frequently.

Marching and Exercise are used mainly to instill a note of formality into modern Physical Education. They are rhythmical activities, and when a day's plan is carefully constructed, muscles rarely used can be brought into controlled play.

Corrective Exercises are individual exercises, designed for the individual, and performed individually, depending upon the diagnosis obtained

in a complete physical examination. The aim of corrective Physical Education is to eliminate physical defects and to produce a better physique in children thus handicapped.

Story Plays are imaginary adventures using activities which impersonate occupations and activities which the children have seen. When properly done, story plays can provide a great deal of exercise of varying sort. They also serve to enlarge the child's dramatic ability.

JUSTIFICATION

That a study of this sort is desirable, is shown in the lacks of skills and attitudes exhibited by students entering Junior High and High School, as indicated by the American Association for HPER.[1]

Position of Physical Education in the Curriculum. Physical Education activities form an integral part of the school curriculum, and as such, should receive a fair allotment in the school day. This should be time spent under the direction of a Physical Educator in purposeful activity. Purposeful activity may include any of the components of a good program, all of which satisfy the child's need for natural movement.

We recognize that play is instrumental in large measure for the inculcation of the "abstracts". Through play, children learn and accept the underlying moral and social concepts of our civilization and so play contributes to the educational development of individuals through the medium of the enhancement of health, neuro-muscular skills, attitudes, and proper social conduct.

Because of its contributions to the total child, Physical Education should be included in all school curricula, on a level with the acedemic

[1] AAHPER, Eastern District Association, Third Year Book, 1949. pp152-3

subjects. If school is preparation for life, the knowledge of, and the attitude toward fair-play and good sportsmanship built in healthy bodies, has a tremendous carry over value.

Present day emphases in Physical Education. The major emphasis in Physical Education today, seems to be upon the high school level, and more specifically upon boys' interscholastic sports. Physical Education has lost ground in inverse relation to the growth of interschool athletics. Cities and towns are building new stadia, are employing high-salaried coaches, are purchasing handsome new uniforms and equipment, and are concentrating upon the proficiency of their varsity teams. Little money is spent for equipment and facilities for the Physical Education classes in High and Junior High Schools, and less is spent upon the Physical Education masses in the Elementary Schools.

It would seem, therefore, that the present practises in Physical Education are unfair to the Elementary School pupils, and to the non-athletic secondary school students. They are not receiving the full benefits of that part of education which contributes so fully to the physical, social, and moral development of the individual, Physical Education.

The child in the early grades is going through stages of growth that demand most careful attention to his physical activity needs. The natural play activities in which these children participate are essential to their total welfare in later life, as these early imprints produce lasting impressions. An increase of the effectiveness of the Elementary School Physical Education program will lead to a decrease of the necessity for expensive corrective work in the Secondary Schools. As the Physical Educator is familiar with the physical growth characteristics and behavior tendancies,

he, of course, should assume full responsibility for the program of Physical Education in the Elementary Schools.

METHODS OF COLLECTING DATA

As the method of collecting data differed with the postal card, and the questionnaire itself, they will be treated in two parts.

PRELIMINARY POSTAL CARD SURVEY

Postal cards were sent to the Principals of 363 Massachusetts Elementary Schools, in 116 communities withingthe population limits of 5,000 and 50,000. The principal was selected as the recipient, as he is closer and more familiar with his own individual situation, and can consult with the Physical Educator in his school on points not known to him.

The cards were sent proportionately, according to the number of schools in the different population groups. These groups were in steps of 5,000. Group A contained 56 towns in the 5,000 to 10,000 range; Group B included 20 communities in the 10,000 to 15,000 range; Group C, the interval between 15,000 and 20,000, contained 15 cities and towns; 9 communities between 20,000 and 25,000 population, became Group D; Group E, the 25,000 to 30,000 step, contained 5 cities; Group F consisted of 4 communities between 35,000 and 40,000; Group G, between 40,000 and 45,000, included 5 cities; and 2 communities were between 45,000 and 50,000 in population, to become group I. A minimum of two cards were sent to each population group, so that the possibility for some response from each community would increase.

194 cards, or 54%, were returned from 92 communities. The percentage of communities responding was 79%. A second card was sent to the Superintendents of Schools in those populations in which the principals of the

cities or towns that did not respond originally. 17 out of 24 (71%) were returned, which gave an overall return from 109, or 94%, of the cities and towns in the 5,000 to 50,000 population group.

The responses to the questions were as follows:

Question I. Do you have the services of a Supervisor or Special Teacher of Physical Education? 169 or 87% replied yes, and 25 or 13% answered no.

Question II. Do you have a gymnasium or playroom? 101 or 52% said yes, 92 or 47% said no, and 1 did not answer.

Question III. Does the Classroom teacher teach any Physical Education? 162, or 84%, answered yes, 27, or 13%, said no, 2, or 1%, indicated that they taught some, and 3, or 2%, did not answer.

Question IV. Is the time allotted for Physical Education other than recess time? 179 (92%) yes, 13 (7%) no, 1 ($\frac{1}{2}$%) sometimes, and 3 ($1\frac{1}{2}$%) did not respond.

Question V. Would you or the Supervisor be willing to complete a short questionnaire? 183 (94%) said yes, 2 (1%) checked no, 3 (1%) were question-marks, and 6 (4%) did not answer this question.

Table 1

Numerical Responses to Preliminary Card

Question	Yes	No	Sometimes	Question	No Answer	Totals
I	169	25				194
II	101	92			1	194
III	162	27	2		3	194
IV	179	13	1		1	194
V	185	2		3	6	194

Tables 2

Percentage Responses to Preliminary Card

Question	Yes	No	Sometimes	Question	No Answer	Totals
I	87	13				100
II	52	47			1	100
III	84	13	1		2	100
IV	92	7	½		½	100
V	94	1		1	4	100

The proportionate responses, with regard to the number of schools in each community, to which preliminary cards were sent, is as follows:

Table 3

Response of Schools in 56 Communities in Group A

	2 Schools Reporting	1 School Reporting	0 School Reporting	Totals
Number of Towns	29	21	6	56
Percent	52	37	11	100

Both schools from 29 towns responded, 21 of the communities were represented by one school, and in 6 communities, no response was obtained.

Table 4

Response of Schools in 20 Communities in Group B

	3	2	1	0	Totals
Towns	10	6	3	1	20
Percent	50	30	15	5	100

In 10 communities, all schools responded. In 6 cities and towns, 2 schools replied. One school sent in a return in 3 communities, and in one town, no school made a reply.

Table 5

Response of Schools in 15 Communities in Group C

	4	3	2	1	0	Total
Towns	6	4	3	2	0	15
Percent	40	27	13	20	0	100

All schools responded in 6 cities. 3 schools sent replies in 4 communities. 2 schools returned cards in 3 communities. In 2 cities, only 1 school replied, and there were no towns in which no response was received.

Table 6

Response of Schools in 19 Communities in Groups D, E, and H

	5	4	3	2	1	0	Total
Towns	3	5	4	3	3	1	19
Percent	16	26	21	16	16	5	100

All schools responded in 3 communities. In 5 cities and towns, replies were received from 4 schools. 3 communities sent responses from 2 schools, and 1 school responded in 3 other cities. One town sent no response.

Table 7

Response of Schools in 4 Communities in Group G

	6	5	4	3	2	1	0	Total
Towns	3	0	1	0	0	0	0	4
Percent	75	0	25	0	0	0	0	100

All schools responded in 3 communities, and 4 schools sent replies in 1 city.

Table 8

Response of Schools in 2 Communities in Group I

	8	7	6	5	4	3	2	1	0	Totals
Towns	0	0	0	0	1	1	0	0	0	2
Percent	0	0	0	0	50	50	0	0	0	100

4 Schools returned the postal cards in one city, and in the other community, 3 schools made responses.

The returns were tabulated in a split-study form, in order to have a check on the accuracy and reliability of the returns. The correlation was .93, which serves to indicate that the responses were quite accurate.

QUESTIONNAIRE RESULTS

203 questionnaires were sent to various schools and individuals. Of this number, 192 were sent to those who returned the preliminary card and indicated their willingness to complete a questionnaire, and to those who did not answer, or put question marks for that question. 11 questionnaires were sent to four communities in which the Supervisor of Physical Education volunteered to complete the forms.

85% of the questionnaires were returned. These were received from 172 schools and supervisors in the Massachusetts communities of 5,000 to 50,000. This is a 48% return from all the schools used in the original 363 postal card survey.

The questionnaires went to 90 communities, and responses were received from 85, a 94% return. Of the original 116 communities, the questionnaire response comes from over 74% of the cities and towns.

The questionnaire was accompanied by a covering letter and stamped return envelope.

RE*STATEMENT OF PURPOSE

It is upon the shoulders of the Elementary Schools to prepare their students for future schooling, and life. The Elementary School years are the formative years, in which the child establishes the bases for his responses in later life.

Physical Education in the Elementary Schools, provides a broad foundation through instruction in the elements of higher level games; the skills for response to rhythms; wisely-directed dramatic activities; individual and small group games learned for recreational and leisure time pursuits; realization of the meaning of team-play, cooperation, good sportsmanship, fairness, and the significance of play.

It is for these reasons that the Elementary Physical Education program should be of such stature. Personal experience has led me to doubt the existance of such a program in Massachusetts. The purpose of this survey, is, therefore, to seek out the prevailing program, and to strike a blow for the future of Physical Education in the Elementary Schools of Massachusetts. A program designed for, and about, the little people of the Commonwealth.

CHAPTER II

RESEARCH BACKGROUND

DEVELOPMENT OF PHYSICAL EDUCATION IN U.S.

Physical Education as an integral part of our whole educational system, has been developing and expanding for many years. Attention was first placed upon the necessity and value of physical activities in the times of the Greeks and Romans, and that concept, except during the early Christian era has been held and maintained.

Development in this Country. During the early development of the Physical Education program in this country, we were beseiged by many different activities, stresses and phases of Physical Education. Each separate school of thought strove to increase itw own importance, and minimize other methods. These conflicts have been tempered by the development of well-rounded programs of Physical Education, based upon known and accepted principles of physiology, psychology, and child development.

During the early Colonial Period, little stress was placed upon Physical Education, except for those familiar childhood activities which are universal. The primitive conditions of their existance and energy required for satisfying the necessities of life, provided much physical activity, hence purely recreational games were unknown.

When physical activities entered the educational world, they were viewed only as a means of correcting posture and securing discipline of the will. As time went on the program of interscholastic activities for the few gained momentum.

Physical Educationnin this country, started out on a topsy-turvy plane.

It began in the universities, with its emphases mainly upon activity for the few, and designed for competitive purposes. As the movement gained strength, the physical educational system assumed a rigid, unnatural form. No effort was made to provide the activity needed by the individual, but all students were forced into stereotyped, military, muscle-building work. This form of physical training, for it is not education, sifted down even into the elementary grades, and remained there for a long period of time.

That changes were constantly occuring in the patterns of Physical Education can be indicated by the varying titles bestowed upon the activities programs. In the beginning, it was known a Physical Culture, which was a bodily activity, and compared with other educational terms, as Social Culture, Religious Culture, Intellectual Culture, and the like. The influence of the calisthenics era, with its emphases on gymnastics and militarism, gave appropriate rise to the term Physical Training. Physical Education, as a title, denotes recognition of the educational values of physical activities, and demonstrates that Physical Education is an integral part of, and definitely serves the broader purposes of education, as a way of life.

Relationship of Physical Education and Education. Perhaps Rousseau, and his influence upon educational theory and practice provided the impetus for the change from the formal gymnastic program, to the theory of Physical Education, as based upon the individual child's interests, needs and abilities. Basedow, with the organization of the first school which applied this naturalistic theory, followed along, and demonstrated that such a program was feasable.

Thus, Physical Education, in its development, has followed closely the emphases of general education. Concomitant with the elimination of rigid, formal academic training for college preparation, has come the change in Physical Education. No longer is it merely the means to achieve physical development, instead, the aim has expanded to include the health, social, educational, and recreational welfare of the child. In so programming, Physical Education makes a more valuable contribution to the broad educational program.

Theory of Play. The theory of play has undergone its evolutionary stages, in concurrance with the systems used. The gamut started with the so-called surplus energy theory, advanced to the recreation theory, reached the instinct-practice theory, and progressed to the recapitulation theory. The concept of present day acceptance is the self-expression theory. The content and intent of these theories is evident in their descriptive names.

Other Factors of Influence. The incentive for early attempts to incorporate physical activities into public centers can be traced to the political refugees from Germany, who attempted to make their gymnastic system popular in this country. Their original attempt ended in failure, but a later effort was more successful. A rivalry occured when proponents of the Swedish system endeavored to popularize their program. Both systems had great influence upon American tendencies in Physical Education.

World Wars I and II, with the high percentage of army rejects, caused educators to question the validity of the Physical Education practices, and the Health Services, of the day. The program was surveyed with great attention, and as a result of this, recommendations were suggested and made

to provide more time, better facilities, and improved programs.

All of these factors, theories and practices have had a tremendous effect upon modern-day physical education. It has taken many nations, many organizations and many individuals to evolve the present day Physical Education program in the United States.

TIME ALLOTMENT FOR PHYSICAL EDUCATION IN THE ELEMENTARY SCHOOL

The suggested time allotment for physical education in the elementary school grades, varies with the authority. Some authorities, as Voltmer and Esslinger[1] recommend a sixty minute allowance each day, exclusive of recess time, with the teacher of physical education. Those authors who do not set a specific time span, as Sehon, et al[2] write that the program should be daily, long enough for participation by all, and should offer experiences in all the types of activities valuable to the age concerned.

According to a survey[3], the lowest minimum weekly requirement by sixteen states is zero, while the highest minimum requirement is 255 minutes weekly, and is found in but one state. The average minimum in all states, is about 66 minutes per week. Unfortunately[4], the minimum requirement in most states has become the maximum. In other words, the schools have been content merely to achieve the minimum, and neglect any advance in time allotment, as recommended by educators.

1 Voltmer, E.F. and Esslinger, A.A., The Organization and Administration of Physical Education. Appleton-Century Crofts, Inc., New York, 1938 p.99.

2 Sehon, E.L., et al, Physical Education Methods for Elementary Schools. W.F. Saunders, Co., Philadelphia, 1949. pp. 36-38.

3 Voltmer, E.F. and Esslinger, A.A., Op. Cit., pp. 97-99

4 American Association for Health, Physical Education and Recreation, Second Year Book Washington, D.C., 1946, p. 61.

THE ACTIVITIES RECOMMENDED FOR THE ELEMENTARY SCHOOL PHYSICAL EDUCATION PROGRAM

The activities presented to children in the elementary grades, should be selected on the basis of their values in achieving the objectives of Physical Education. Sehon, et al[1] consider the well-rounded program of Physical Education, as a combination of the various activities, each of which contributes to at least one phase in the complete physical, social or emotional development of the child. They agree that while swimming comes nearest to being the perfect exercise, facilities are rarely available at the elementary school level, and so the program must be composed of other activities. Rhythmic experiences combine big-muscle effort with creative effort and group consideration; running games and stunts develop strength, endurance and body control; team games and lead-up activities continue organic stimulation and provide experience in group playing and planning. Through all these activities, skills in body control, general motor ability and of specific sport knowledge is learned.

Many authorities have listed the activities in order of their importance and desired emphases in terms of the allotment of Physical Education class time. There are variations in emphasis, but on the whole, they are in fairly close agreement as to which activities deserve the most, and least, time.

LaPorte[2] made a study of the opinions of experts in the field, and obtained the following percentages, for the primary grades. Rhythms 30%, Games 30%, Mimetics 10%, Story Plays 10%, Relays 10%, Stunts 10%. The

[1]Sehon, E.L., et al. Op. Cit. p.35.

[2]LaPorte, William R., The Physical Education Curriculum, University of California Press, Los Angeles, 1947, p.21.

intermediate grades receive slightly different time allotments. These are: Rhythms 25%, Games 35%, Individual Activities 10%, Mimetics 10%, Relays 10%, and Stunts 10%. Few experts recommend Marching and Exercise or Apparatus Activity, and most suggest that Corrective Physical Education be done on an individual basis, and in addition to the regularly scheduled period for Physical Education.

The activities do not differ in type, from grade to grade, but in difficulty. There should be a distinct progression in all activities, through all the grades. The program should be designed to meet the changing needs of the children at their advancing age and grade levels. In situations where time is a limiting factor, the same activities should be presented, in order to provide for a well-rounded program. When more time is available, each activity may be increased in proportion, yet the amount of emphasis remains unchanged.

FACILITIES RECOMMENDED FOR THE ELEMENTARY SCHOOLS

Outdoor Playspace. The basis for the amount of outdoor playspace needed for the proper execution of the educational and recreational play activities is dependent upon that program, rather than upon the enrollment of pupils. Salt, et al[1], recommend a minimum of two acres of level playing area for fifty pupils, until the enrollment reaches five hundred. Other authorities are in approximate concurrence with these figures.

The surface should be of grass whenever possible. It is expensive to maintain, and for that reason, many schools cannot obtain the desirable

1 Salt, E. Benton, et al., Teaching Physical Education in the Elementary School, A.S. Barnes Col., New York, 1942, pp. 14-16.

turf-surface. Dirt is not satisfactory, unless treated with a binder, Asphalt, gravel, cinders, granite, concrete and macadam are also used, the last two being the least objectionable, from a standpoint of cleanliness, durability, and safety. Part of each area should have one of these types.

Indoor Playspace. All authorities emphasize the necessity for a gymnasium or playroom in the elementary schools. The requirement for size on the primary and intermediate grade level, is that it be large enough to provide for those games and activities that require the greatest space. The room to be used for Physical Education, must be even-shaped, without obstructions or projections, and approximately one and a half times as long, as it is wide. The clearance from floor to ceiling, should be from twenty to twenty-two feet. Sharmon[1] indicates that the minimum size for an elementary school playroom, be forty by seventy feet.

The surface should be of hard wood, preferably hard maple, although some schools report satisfactorily upon a cork surface.

Equipment. In a survey of the literature pertaining to outdoor equipment, practically every thing made is listed in at least one source. Those articles of equipment which received the greatest listing are: a safety climbing tree, slides, giant stride, jungle gym, swings, seesaws, sandbox, horizontal ladder, and standards for net suspension, basketball or goal-hi.

Indoor equipment for the gymnasium includes: a piano, phonograph with records, net standards, and possibly a basketball goal placed lower than regulation height. Mats are also recommended, and should be stored on wheeled platforms, in a clean room.

1 Sharmon, Jackson R., Introduction to Physical Education, W.B. Saunders Co. Philadelphia, 1934, p. 27.

O'Keefe and Fahey[1] suggest that each individual class-room have its own supply of perishable materials, with a supplementary, general supply available for Physical Education use. They list the necessary equipment for each thirty-five pupils as a minimum of eight assorted types of balls, six jump ropes, and two bats, a set of bases, twenty beanbags and a net.

TEACHER TRAINING STANDARDS

Teachers of Physical Education should be primarily educators, and then specialists in activities. The training should be broad in scope and emphasis, so that the educator can do the best possible leadership work. The basic requirement for teachers of physical education, is four years of professional and academic training, beyond the high school course. The preparation should approximate standards required for academic teaching, and contain courses in all phases of physical activity, education, sciences, arts, and other fields of human knowledge.

In a study of the states' requirements[2], Voltmer and Esslinger report that only fourteen states require a four year college course, with a physical education major. Ten states require a degree and some hours in Physical Education, two require graduation from a three or four year physical education school. Two states require at least two years of college and some specialization. Eight states require merely some special certification, and ten states have absolutely no requirements at all.

An excellent standard for individuals interested in the teaching of Physical Education, may be found in the catalogue of the University of

1 O'Keefe, Pattric R., and Fahey, Helen, Education Through Physical Activity, C.V. Moseby Co., St. Louis, 1949, p.42.

2 Voltmer, E.F., and Esslinger, A.A., Op.Cit., pp.34-36.

Michigan[1].

> The physical educator should have academic and professional training that is equal in every respect to that of the general educator. He should be respected by the latter as being the intellectual equal of those engaged in teaching the other subjects in the curricula of the schools.... The physical educator must be by virtue of his training, his ideals, and the importance of his work, an integral part of the faculty. He must be a real schoolman.

A factor which may not be overlooked, is that of experience. Experience is valuable if success is achieved, or if there is realization of the causes of failure in previous situations. It is even more valuable, when it is varied.

1 School of Education Catalogue: University of Michigan, 1924-25, p.83.

CHAPTER III

ANALYSIS OF DATA

The information received and assembled on the questionnaires, was tabulated by means of percentages, and the results appear below.

Pupil Population. The responses to this item were spaced in groups of fifty. 22 or 12% of the 172 schools have from 50 to 100 pupils. 24 schools, or 14%, have from 100 to 150 pupils. 150 to 200 pupils are enrolled in 32 or 19% of the schools. 28 or 16% of the schools have between 200 to 250 pupils. In 16 schools, or 19%, the pupil population is between 250 and 300. And 42 or 26% of the schools have over 300 pupils enrolled. 8 schools, or 4% did not answer this item.

Table 9

Pupil Population

	50-100	100-150	150-200	200-250	250-300	over 300	no Answer	Totals
Schools	22	24	32	28	16	42	8	172
Percent	12	14	19	16	9	26	4	100

Tax Rate. The tax rate figures were tabulated in $5.00 intervals. 17 schools, or 10% were in communities where the tax-rate was between $30.00 and $35.00. In the $36.00-$40.00 group, there were 44, or 27% schools. In the $41,00 to $45.00 tax group were 31, or 18% schools. 18, or 11% schools had a community tax rate from $46.00-$50.00. 23, or 13%, schools were from towns between $51.00-$55.00. In the $56.00-$60.00 group there were 13 or 8%, schools. 3 schools, or 1%, went in communities between $61.00-$67.00.

21 schools, or 12%, did not answer this query.

Table 10

Tax Rate Distribution

	$30-35	$36-40	$41-45	$46-50	$51-55	$56-60	$61-65	No Ans	Totals
Schools	17	44	31	18	23	13	3	21	172
Percent	10	27	18	11	13	8	1	12	100

There was no difference in either the quality or quantity of the Physical Education set up, as the Tax rate figure increased. There was little variation within the towns, ut otherwise the individual differences are too extreme, among the communities.

This item was alsc used as a reliability check, in that the responses were checked against the tax rate figures, as published. The agreement of these figures was exact.

Outdoor Playspace. 12, or 7%, of the schools have an outdoor play area smaller than 25 x25 yards. 15 schools, or 9%, report an area between 25 x 25 yards and 50 x 25 yards. Play space size between 50 x 25 yards and 50 x 50 yards is used by 16 schools, or 9½%. In the category from 50 x 50 yards to 75 x 50 yards are 9% of the schools, or 15. 6 schools reported an area between 75 x 50 yards and 75 x 75 yards, which is 3%. 18 schools, or 10%, use an area size between 75 x 75 yards and 100 x 75 yards. 64, 37%, of the schools have play areas larger than 100 x 75 yards. Less than ½%, or one school, designated its area as "large", and 25 schools, or 15%, did not respond.

Table 11

Outdoor Playspace Areas

	Under 25x25	50x25	50x50	75x50	75x75	100x75	Over 100x75	Large	No Ans.	Totals
Schools	12	15	16	15	6	18	64	1	25	172
Percent	7	9	9½	9		11	38	½	15	100

According to the figures obtained, a greater number of schools have play areas of adequate size, than not.

Outdoor Surface. Dirt provided the outdoor surface for the play areas for 60, or 37% of the schools. Grass surfaced 17, or 9%, of the areas. 41, or 23%, of the schools have a combination grass and dirt surface. 24 schools, or 14%, have a hot top. 11%, or 2 schools have a concrete surface. 4 schools, or 2%, have a macadam. The surface of the space for play for 13, or 8% of the schools is gravel, and 10 schools, or 5%, did not answer this item.

Table 12

Outdoor Surface Materials

	Dirt	Grass	Dirt & Grass	Hot Top	Cement	Macadam	Gravel	No Reply	Totals
Schools	60	17	41	24	12	4	13	10	172
Percent	37	9	23	14	1	2	8	5	100

Dirt is the most frequently used surface material. This is followed by a combination of dirt and grass, and then the hot top.

Outdoor equipment. 97, or 56% of the schools in the group studied, have no outdoor equipment, at all. Some schools are well-equiped, while others are extremely limited. Of single items of equipment, more schools have jungle gyms, basketball standards and swings, than other articles of

outdoor apparatus.

Table 13

Outdoor Equipment

	Have Some	1	2	3	4	5	6	Over 6
Balance bar		2	1					
Basketball goals		14	26					
Croquet sets			2					
Giant Stride	1	5						
Goal Hi		3						
Horizontal bar		5						
Jumping standards		4	1					
Jungle gym	3	23	3					
Ladder		2						
Painted bases		4						
Sandbox		6	3					
Seesaws	4	3	8	2	14	1	1	2
Slide		23						
Swings	4	2	2	5	5	1	15	4
Trapeze		1						
Volleyball net		2	1					

Indoor Playspace. 89, or 51½%, of the 172 schools used in this survey, have no indoor facilities for Physical Education, other than classrooms. 9 schools, or 5%, have an indoor space which is smaller than 25' x 25'. 25, or 16%, of the schools have an area between 25' x 25' and 50' x 25'. 8%, or 14 of the schools, report indoor space within 50' x 50' and 50' x 25'. 19 schools, or 11%, have an indoor playspace between 50' x 50' and 75' x 50'. 3 schools, or 1½%, indicated that they used combination auditorium-playrooms, but did not designate the size. 4, or 2% of the schools, did not answer the question.

Table 14

Indoor Playspace Areas

	None	Under 25x25	Under 50x25	Under 50x50	Under 75x50	Over 75x50	Other	No Reply	Total
Schools	89	9	25	14	19	9	3	4	172
Percent	51½	5	16	8	11	5	1½	2	100

Indoor Surface. 83 of the Schools, or those who had an area, were concerned with the response to this item, and 79 of these indicated the type of surface in their school. 38, or 46%, had a wooden surface. Concrete flooring was found in 34, or 41% of the schools. 3 schools, 4%, had an asphalt-tile surface; 1, 1%, had wood blocks; 2, 2%, were of composition, and 1, 1%, was of inlaid lincleum.

Table 15

Indoor Playspace Surfaces

	Wood	Con-crete	Other	No Reply	Total
Schools	38	34	7	4	83
Percent	46	41	8	5	100

Indoor Equipment. All but 6, or 3%, of the schools in the survey, indicated that they had equipment. The amount and variation of equipment, varied from much to very little. The table lists the supplies according to the number of each article possessed by the schools.

Table 16

Indoor Equipment

	Some	1	2	3	4	5	6-10	11-15	16-20	Over 21
Apparatus	3	1	2	1		1	1			
Balls	10		9	5	14	5	33	30	17	28
Bases	5	2	1	16	17	1	15	5	2	
Bats	4		2				2	1		
Beanbags	10		2		8	1	26	23	9	33
Books		2								
Clubs	3	1	5	1	8		13	8	8	7
Drums		2								
Mats	9	9	12	6	3		6	1		
Nets	7	44	19	4	4	1				
Organs		2								
Painted Bases	4									
Records	6									
Ringtoss	1	2	2							
Standards	3									
Wands										1

155 Schools indicated that they had phonographs, while 17 do not. 156 have pianos, 16 do not, and 56 have pianists, while 116 have not.

Physical Education instructors. Of those communities that had a teacher of Physical Education, 23 schools listed nothing under this item. Many of the instructors prepared at more than one college and many received more than one degree. The institutions from which the instructors graduated, are listed below, with the numbers of the graduates.

Institution	No. of Graduates
American International College	1
Amherst College	1
Boston College	2
Boston School of Gymnastics	3
Boston University	23
Bouve'-Boston School of Physical Educ.	12
Bridgewater State Teachers College	4
Cincinnati	2
College (no name specified)	1

Institution (Cont'd)	No. of Graduates
Fitchburg State Teachers' College	7
Harvard University	2
Holy Cross	3
Hyannis State Teachers' College	3
Manhattan College	1
Michigan State College	1
New Haven Normal School	3
Ohio State College	1
Ohio Wesleyan College	1
Posse	26
Russell Sage College	2
Sargent College	42
Savage School of Physical Education	22
Springfield College	16
Syracuse University	2
University of Miami	1
University of Wisconsin	3
Western Reserve	1
Western Washington University	1

The distribution of degrees is also varied. 40 instructors listed a BS in Phys.Ed.; 58 had a BS in Ed.; 4 had a BS; and 7 had an AB. 3 had a Masters degree in Physical Education; 14 had an Ed.M; and 4 had an AM. 15 had no degree, and 23 instructors listed the possession of a diploma.

118 of the instructors majored in Physical Education. 5 majored in the Social Studies; 3 majored in each of Health, English, and Education; and one each listed a major in Science, Business Administration, Mathematics, Dancing, Elementary School Education, and Biology. 28 did not respond to this section of the questionnaire.

The experience of the Physical Education is tabulated in terms of the number of persons teaching the years as listed. In other words, the teachers of physical education in Massachusetts, have taught the years inthe grades and organizations as indicated in the following table.

Table 17

Years of Teaching Experience of
Physical Education Instructors

	1	2	3	4	5	6-10	11-15	16-20	21-25	Over 26
Elementary Sch.	7	15	8	7	11	28	15	23	6	14
Secondary Sch.	17	18	2	8	1	10	11	16	7	12
College	5	1		1						1
Y.W.C.A.	13	5	1			1	1			
Camp	7	12	6	8	3	20	3	11		5
Adult Rec.	2	11	1			5				
Playground	1	3	1			5				
Army & Navy	2			1		2				

Other individuals listed single years of Community Club, Physio-therapy, Posture, Girl Scouts, Red Cross, Boys' Club and Settlement House work.

72, or 47%, of the instructors are members of the American Association for Health, Physical Education and Recreation, 80, or 53%, do not. 74, or 48%, are members of the Massachusetts Association, 77, or 52%, do not. 5, or 3%, hold memberships in the National Education Association.

116, or 74%, of the instructors are women, while 39, 26%, are men.

The greatest number of Physical Education Instructors was in the "over 41" group, while the smallest number was in the youngest bracket. All schools having the services of a Specialist, answered this item.

Table 18

Ages of the Physical Educators

	20-25	26-30	31-35	36-40	Over 41	Totals
Instructors	24	25	30	30	46	155
Percentage	15	16	19½	19½	30	100

Other duties. The majority of Physical Education Instructors have duties other than the teaching of Physical Education in the Elementary Schools. 95 instructors have after school or extra class activities, 36 others coach varsity and interclass teams. 53 are responsible for the teaching of Health, 72 have Secondary School classes, while 11 teach academic subjects. 8 have corridor duty, and 4 have yard duty. 5 others teach safety, and one has certain sanitary duties to discharge.

Physical Education Periods per month. During a month, the number of periods of Physical Education taught by the Physical Education teacher varies from none at all to 19. The Class-room teachers have activity periods from none to 20 periods per month.

Table 19

Number of Physical Education Periods Taught by the Physical Education Teacher Per Month

Grades	0	1 each 6 wks.	1 each 3 wks.	1	2	3	4	5	6	8	10-14	15-19	Total
I	19	1	5	34	54		51		2	6			172
II	19	1	5	34	56	1	46		2	6			170
III	17	1	4	34	55		49		1	5	2	1	169
IV	16	1	4	32	53		47		1	7		5	164
V	16	1	4	34	47		46		1	8		6	162
VI	14	1	4	28	49		50	1		7		6	160

Table 20

Percentage of Physical Education Periods Taught by the Physical Education Teacher per Month

Grades	0	1 each 6 wks.	1 each 3 wks	1	2	3	4	5	6	8	10-14	15-19	Total
I	11	½	3	20	31		30		1	3½			100
II	11	½	3	20	33	½	27		1	4			100
III	10	½	2	20	33		29½		½	3	1	½	100
IV	10	½	2	20	31		29		½	4		3	100
V	10	½	2	21	30		29		½	5		4	100
VI	9	½	3	18	31		31	½		7		6	100

Table 21

Number of Physical Education Periods
Taught by Classroom Teacher per Month

Grades	0	1	2	3	4	5	6	7	8	10-14	15-19	Over 20	Total
I	46			5	23	3	3	2	6	11	17	52	172
II	44		1	4	22	3	3	2	6	12	17	52	170
III	43		2	4	22	4	3	2	7	12	17	49	169
IV	46		1	3	22	4	3	2	7	11	14	49	164
V	50	1	1	2	21	5	2	2	7	11	14	43	162
VI	50	1	1	2	21	5	3	1	5	11	14	43	160

Table 22

Percentage of Physical Education Periods
Taught by Classroom Teachers Per Month

Grades	0	1	2	3	4	5	6	7	8	10-14	15-19	Over 20	total
I	27			3	13	2	2	1½	3½	6	10	32	100
II	26		½	2	13	2	2	1	4	7	10	32½	100
III	25		1	2	14	2	2	1	4	7	10	32	100
IV	28½		½	1½	13	2	1½	1	4	7	9	32	100
V	31½	½	½	1	13	3	1	1	4	7	9	28½	100
VI	32	½	½	1	13	3	2	½	3	7	9	28½	100

Length of Physical Education periods. The length of the periods of Physical Education varies from 10 minutes to 40 minutes in Grade I, and from 10 minutes to 60 minutes in Grade VI.

Table 23

Length of Periods of Physical Education
In Minutes

Grades	10	15	20	25	30	35	40	45	60	Total
I	2	13	89	22	41	3	2			172
II	2	12	91	20	40	3	2			170
III	2	8	81	21	51	3	2	1		169
IV	2	5	66	21	56	3	5	6		164
V	2	3	58	17	65	2	7	7	1	162
VI	2	3	58	14	66	2	8	5	2	150

Table 24

Length of Periods of Physical Education
by Percentage

Grade	10	15	20	25	30	35	40	45	60	Total
I	1	8	52	13	23	2	1			100
II	1	7	54	12	23	2	1			100
III	1	5	48	12	31	1½	1	½		100
IV	1	3	40	13	35	1½	3	3½		100
V	1	1½	35	11	40	1	5	5	½	100
VI	1	2	36	9	41	1	5	4	1	100

In Grades I-IV, the length of time most used for Physical Education periods, is 20 minutes. Grades V and VI are given more time, the greatest stress being on the 30 minute period, with a 20 minute session also frequently used.

Physical Education Program. The program of Physical Education is tabulated below, grade by grade. Grade I received 172 questionnaires, and so is larger than the others.

Table 25

Physical Education Program by Numbers
Grade I

Activities	Frequently	Often	Seldom	Never
Games	145	18	8	1
Individual Games	24	26	48	74
Relay Races	34	27	42	69
Rhythmics	119	34	11	8
Mimetics	51	37	33	51
Stunts	26	34	38	74
Apparatus Activity	0	3	24	145
Marching & Exercise	51	34	28	59
Story Plays	77	36	20	39
Correctives	25	14	38	95

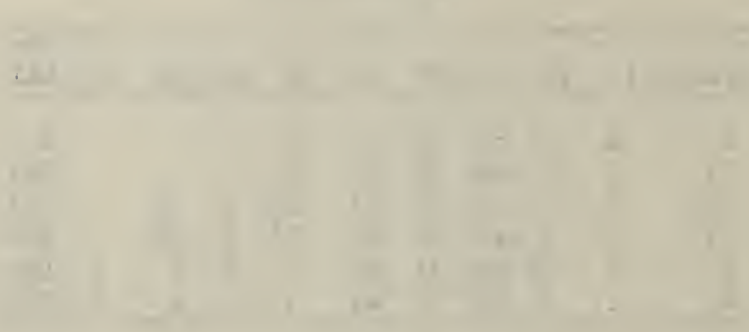

Table 26

Physical Education Program by Percentage
Grade I

Activities	Frequently	Often	Seldom	Never
Games	84½	10	5	½
Individual Games	13	15	28	1
Relay Races	20	16	24	40
Rhythmics	69	20	6	5
Mimetics	30	21	19	30
Stunts	15	20	21	44
Apparatus Activity	0	2	14	84
Marching & Exercise	30	20	16	34
Story Plays	45	20	12	23
Correctives	15	8	21	56

Grade II responses were received from 170 questionnaires.

Table 27

Physical Education Program by Numbers
Grade II

Activities	Frequently	Often	Seldom	Never
Games	134	23	9	4
Individual Games	16	34	42	78
Relay Races	43	45	33	49
Rhythmics	120	33	8	9
Mimetics	48	33	37	52
Stunts	24	34	38	74
Apparatus Activity	0	6	27	137
Marching & Exercise	65	33	28	44
Story Plays	78	38	14	45
Correctives	36	17	31	86

Table 28

Physical Education Program by Percentage
Grade II

Activities	Frequently	Often	Seldom	Never
Games	79	14	5	2
Individual Games	10	20	25	45
Relay Races	26	27	18	29
Rhythmics	71	18	5	6
Mimetics	29	18	22	31
Stunts	14	20	38	74
Apparatus Activity	0	4	16	80
Marching & Exercise	39	19	17	25
Story Plays	43	23	8	26
Correctives	21	10	18	51

169 questionnaires were received from schools having a third grade, their responses appear below.

Table 29

Physical Education Program by Numbers
Grade III

Activities	Frequently	Often	Seldom	Never
Games	148	14	4	3
Individual Games	16	51	40	62
Relay Races	64	55	24	26
Rhythmics	100	39	17	13
Mimetics	43	42	32	52
Stunts	21	29	43	76
Apparatus Activity	0	5	31	133
Marching & Exercise	79	39	31	20
Story Plays	33	24	23	89
Correctives	34	21	42	72

Table 30

Physical Education Program by Percentage
Grade III

Activities	Frequently	Often	Seldom	Never
Games	88	8	2½	1½
Individual Games	9	30	24	37
Relay Races	38	33	14	15
Rhythmics	59	23	10	8
Mimetics	25	24	19	32
Stunts	12	17	26	45
Apparatus Activity	0	2	18	80
Marching & Exercise	48	23	17	12
Story Plays	20	14	14	52
Correctives	21	12	24	43

166 responses were received for Grade IV, from the schools taking part in this survey.

Table 31

Physical Education Program by Numbers
Grade IV

Activities	Frequently	Often	Seldom	Never
Games	146	15	3	2
Individual Games	30	42	42	52
Relay Races	81	54	20	11
Rhythmics	62	48	35	21
Mimetics	12	33	33	88
Stunts	27	31	37	79
Apparatus Activity	0	1	23	142
Marching & Exercise	74	39	33	20
Story Plays	6	11	34	115
Correctives	41	34	42	49

Table 32

Physical Education Program by Percentages
Grade IV

Activities	Frequently	Often	Seldom	Never
Games	88	9	2	1
Individual Games	18	25	25	32
Relay Races	48	33	12	7
Rhythmics	37	29	21	13
Mimetics	7	20	20	53
Stunts	17	19	22	42
Apparatus Activity	0	½	14	85½
Marching & Exercise	44	23	20	13
Story Plays	4	7	20	69
Correctives	24	21	25	30

The figures on Grade V were received from 162 schools in the State.

Table 33

Physical Education Program by Numbers
Grade V

Activities	Frequently	Often	Seldom	Never
Games	144	13	2	3
Individual Games	24	37	43	55
Relay Races	85	44	21	10
Rhythmics	61	39	24	38
Mimetics	7	27	37	91
Stunts	26	30	27	79
Apparatus Activity	3	6	18	135
Marching & Exercise	78	31	27	26
Story Plays	3	8	34	117
Correctives	36	31	33	62

Table 34

Physical Education Program by Percentage
Grade V

Activities	Frequently	Often	Seldom	Never
Games	89	8	1	2
Individual Games	15	23	26	36
Relay Races	52	27	18	7
Rhythmics	38	24	15	33
Mimetics	4	11	23	56
Stunts	15½	19	16½	49
Apparatus Activity	1	4	12	83
Marching & Exercise	48	20	16½	15½
Story Plays	1	5	21	73
Correctives	22	20	21	37

Table 35

Physical Education Program by Number
Grade VI

Activities	Frequently	Often	Seldom	Never
Games	143	11	3	3
Individual Games	26	31	44	59
Relay Races	79	48	22	11
Rhythmics	49	38	28	45
Mimetics	6	24	32	98
Stunts	27	29	32	72
Apparatus Activity	4	2	23	131
Marching & Exercise	85	33	22	20
Story Plays	2	6	31	121
Correctives	35	32	29	64

Table 36

Physical Education Program by Percentage
Grade VI

Activities	Frequently	Often	Seldom	Never
Games	89	7	2	2
Individual Games	16	19	28	37
Relay Races	49	30	14	7
Rhythmics	31	23	17	29
Mimetics	4	15	20	61
Stunts	17	18	20	45
Apparatus Activity	2½	1½	15	81

Table 36 (cont'd)

Physical Education Program by Percentage
Grade VI

Activities	Frequently	Often	Seldom	Never
Marching & Exercise	53	21	14	12
Story Plays	1½	3½	19	76
Correctives	22	20	18	40

Under the program list, on the space alloted for "other", 6 schools indicated that they had a clinic for correctives; 3 had after school sports programs; 2 had team games for grades 5 and 6; a had track for grades 5 and 6; and 5 had square dancing. The square dancing was separated into 2 schools provided it for Grades 1-6, 1 school taught it for grades 4-6, 1 school had it for grades 1-4, and 1 school taught square dancing for grades 3-6.

Copies of the results. Of the 172 schools used in this survey, 151, or 88%, of them indicated that they wished to receive copies of the results. 2%, or 3 schools, said they did not wish to receive them. 18 schools, or 10%, did not answer this question.

Educator's comments. The comments, for the most part, were concerned with the lack of facilities and time allotment for the Physical Education program. Only one principal thought that his school had an excellent program. Several communities indicated that Physical Education had just reached the Elementary School level, and so the program was in the state of growth. Schools which had no Physical Education, indicated that they thought it necessary, and would like to have such a program.

The principals were most generous with their time and information, and

it would seem through statements appearing on their returned questionnaires, are most interested in the problem of the Physical Education program in the Elementary Schools.

CHAPTER IV

SUMMARY AND CONCLUSIONS

This study of the Physical Education program in Massachusetts Elementary Schools between the population ranges of 5,000 to 50,000, was done with the kind and interested cooperation of the principals and teachers of Physical Education in the various schools and communities.

COLLECTING DATA

Postal cards were sent to 363 Massachusetts schools in 116 communities, between the population ranges of 5,000 and 50,000.

194, or 57% of these cards were returned from 92 or 79% of the cities and towns.

In order to establish the status of Physical Education in the 24 communities not responding to the original request, a card was sent to each superintendent of schools. 17, or 66%, of these were returned. Of these, 9 communities did not have Physical Education and 8 did. These returns made the overall response from all communities 109. Thus, responses were received from 94% of the 116 cities and towns contacted for this study.

Following the return of the postal card, 203 questionnaires were sent to 90 communities, to those principals who indicated their willingness to complete one. In this number were 4 communities whose supervisors volunteered to answer the form.

Responses were received from 172 schools, which was an 84% return. This resulted in a 48% return of the original 363 schools contacted. These questionnaires were returned from 85 cities and towns, which represented

94% of the communities to which questionnaires were sent, and 74% of the original 116 cities and towns to which the original requests were dispatched.

PRELIMINARY CARD RESULTS

On question I on the preliminary card, "Do you have the services of a Supervisor or Special Teacher of Physical Education?", 169 (87%) of the schools answered yes, and 25 (13%) answered no.

On question II, "Do you have a Gymnasium or Playroom?", 101 (52%) affirmative replies were received, 92 (47%) reported in the negative, and 1 (1%) principal did not answer.

For question III, "Do the Class-room teachers teach any Physical Education?", 162 (84%) were yes's, 27 (13%) were no's, 2 (1%) were some's, and 3 (2%) did not respond.

179 (92%) principals answered yes to question IV, "Is the time alloted for Physical Education other than that of recess time?", 13 (7%) answered no, 1 ($\frac{1}{2}$%) answered sometimes, and 1 ($\frac{1}{2}$%), did not answer this question.

On question V, "Would you or the Supervisor be willing to answer a short questionnaire?", 183 (94%) responded yes, 2 (1%) answered no, 3 (1%) answered with a question mark, and 6 (4%) did not reply.

QUESTIONNAIRE RESULTS

The results of this study indicated that there are definite handicaps, as well as some good aspects of the Elementary School Physical Education program in the Commonwealth. The most desirable element is the manifestation of interest in this phase of the educational program, on the part of the principals and supervisors who completed and returned the questionnaires.

The majority of the schools have a pupil population of over 300, followed by an enrollment between 150 and 200 pupils. The tax-rate of the communities is greater in the bracket of from $36 to $40. There is no correlation between the tax-rate and the quality of the Physical Education program, perhaps because it is not possible to check the amount pro-rated to the schools, or the variations of assessed valuations.

Facilities. Most of the schools have an outdoor play area, with the majority possessing one larger than 100 yards by 75 yards. In this respect, the schools approximately attain the size suggested by the various authorities, as described earlier. The surface found most often is a dirt one, which does not agree with the recommendations of the experts. The outdoor equipment is inadequate, as attested by the 56% of the schools which have none at all. For those that have some apparatus, jungle gyms, basketball standards and swings are the predominating articles of equipment.

The lack of indoor gymnasia is an important factor to be considered. 51% of the schools in the survey have no indoor play area at all. Of those who do, the greatest number have a playspace smaller than 50'x25', with wooden flooring. The size is below the accepted standards, but the surfacing material is adequate.

Most of the schools possess equipment, in some form or another. The greatest emphasis is upon balls, beanbags and nets. Phonographs and pianos are found in most schools, but less than 37% have pianists, which makes the possession of pianos a limited consideration.

Physical Education Instructors. The instructors of Physical Education in the Massachusetts Elementary Schools, are graduates of 28 different colleges, universities and professional schools. Most of these graduates hold

a first degree, some have a Master's degree, and about 16% have a diploma. The major subject, in 69% of the cases, was Physical Education. The teaching experience of these instructors is varied, but the majority lie in the 6-10 years, and 16-30 years of teaching experience, groups.

Less than half of the teachers of Physical Education are members of either the Massachusetts or American Associations for Health, Physical Education and Recreation, and 3% indicated a membership in the National Education Association. 74% of the instructors are women. The greatest group of teachers is found in the "over 41" age bracket, while the smallest number is in the 20-25 years group.

The duties of the Physical Educators include assignments other than the teaching of Elementary School Physical Education. Most are required to take activity classes after the close of school, a large number being responsible for the Secondary School Physical Education program, as well.

Number of Periods of Physical Education Taught Monthly. Approximately 30% of the Massachusetts Elementary Schools, according to this survey, receive a visit from the special teacher of Physical Education every two weeks. Another 30% are visited weekly, and the other 40% have visits ranging from never to 19 times per month. These percentages include only those schools who have the services of a special teacher.

Physical Education with the classroom teacher, in all communities, finds about 30% receiving none at all; 30% receiving a daily period, and the other 40% ranging between these extremes.

The children in the Massachusetts Elementary Schools do not receive the amount of Physical Education recommended by the authorities cited in the literature.

Length of Periods of Physical Education with Specialist. The length of the period of Physical Education found in over half of the schools in Grades I-IV, is 20 minutes. The range of period length is from 10 to 40 minutes.

In Grades V and VI, the length of the periods ranges from 10 - 60 minutes, with about 40% of the Schools receiving a 30 minute period, and 36% receiving a 20 minute lesson.

Physical Education Program. The program of Physical Education follows in some part that recommended by leaders in the field. In the primary grades, Games receive the most stress with Rhythmics being taught almost as frequently. Individual games, mimetcs and stunts are not taught as often as suggested in the literature, while Marching and Exercises are presented more frequently than the authorities recommend. The Story Plays, Apparatus Activity and Relay Races are taught at their proper intervals, according to the literature.

In grades Iv-VI, the Games, Relay Races and Apparatus Activities are taught as often as recommended, while insufficient emphasis and time is expended upon Rhythmics, Individual Games, Mimetics and Stunts. More than the suggested percentage of time is alloted to Marching and Exercise.

In most instances, no correctives were done at all, and less than 40% indicated that all grades had some work in this part of the program.

A study of the percentages of time alloted to the various activities in the Elementary School program, indicates that Massachusetts schools have not as yet eliminated the formal and disciplinary activities to the extent that its removal is recommended by leaders in the field of Physical Education.

Massachusetts Elementary Schools are distinctly handicapped by their inadequacies of space, time, personnel, and equipment. They do have an interest and an appreciation of the necessity of a sound Physical Education program, and so the interest may, and must, turn in to action.

SUGGESTIONS FOR ADDITIONAL STUDY

A study of the physical education program in those elementary schools of Massachusetts under 5,000 and over 50,000 in population, would contribute a more complete picture of the entire program.

Another area for investigation would be a study of the adequacy of the program in relation to the amount of equipment in each school, in order to establish the effect of the presence or lack of equipment upon the resultant program of activities.

A comparison of the physical education program in schools of the same size would make an interesting study.

APPENDIX

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PRELIMINARY POSTAL CARD

Do you have the services of a Supervisor or Special Teacher of Physical Education?	Yes No
Do you have a Gymnasium or Playroom?	Yes No
Do the Classroom Teachers teach any Physical Education?	Yes No
Is the time alloted for Physical Education other than that of recess time?	Yes No
Would you or the Supervisor be willing to answer a short questionnaire?	Yes No

Signed _____

Title _____

A STUDY OF THE PHYSICAL EDUCATION PROGRAM IN CERTAIN PUBLIC ELEMENTARY SCHOOLS IN MASSACHUSETTS CITIES AND TOWNS

SCHOOL NAME_____CITY OR TOWN_____
PUPIL POPULATION (grades 1-6)_____TAX RATE_____

NOTE: Check the response below, which most closely applies to your situation. Where you answer under "Other", please be specific.

I. FACILITIES

A. OUTDOOR PLAYSPACE
Approximate dimensions_____x_____yds. Surface (Grass, dirt, etc)_____
Equipment. (Note approximate numbers)
Swings_____, Seesaws_____, Jungle gyms_____, Others_____

B. INDOOR GYMNASIUM OR PLAYSPACE
Approximate dimensions. _____x_____ft. Surface_____

C. EQUIPMENT (Note approximate numbers).
balls_____ bases_____ mats_____ apparatus_____ phonograph_____ Pianist_____
clubs_____ nets_____ ropes____ beanbags_____ piano _____ other_____

II. PHYSICAL EDUCATION INSTRUCTORS

A. Graduate of_____ Degree_____Major subject_____
B. Experience (Number of years)
Elementary School_____, Secondary School_____, College_____
YWCA_____ Camping_____, Other_____
C. Professional Association Membership (Yes or No)
AAHPER_____State Association_____
D. Age and Sex 20-25_____, 26-30_____, 31-35_____, 36-40_____, 41-____ M F
E. Other Duties
health instruction_____ Secondary School _____Afterschool act_____
academic teaching_____ Corridor duty _____Yard duty_____Other_____

III. NUMBER OF PERIODS OF PHYSICAL EDUCATION TAUGHT BY:

	PHYSICAL EDUCATION INSTRUCTOR EACH MONTH (grades I II III IV V VI)	CLASSROOM TEACHER (I II III IV V VI)
Monthly		

IV. LENGTH OF PERIODS OF PHYSICAL EDUCATION WITH SPECIALIST (in minutes)
Grades: I_____, II_____, III_____, IV_____, V_____, VI_____

V. PHYSICAL EDUCATION PROGRAM (For those activities that are taught most frequently place a check under "F". For those taught less frequently but quite often, check under "O". For those activities used as "extras", "Fillers", or seldom, check "S".)

	GRADES I			II			III			IV			V			VI		
	F	O	S	F	O	S	F	O	S	F	O	S	F	O	S	F	O	S
GROUP GAMES																		
INDIVIDUAL GAMES																		
RELAY RACES																		
RHYTHMIC ACTIVITY																		
MIMETICS																		
STUNTS																		
APPARATUS ACTIVITY																		
MARCHING & EXERCISES																		
STORY PLAYS																		
CORRECTIVES																		
OTHER																		

VI. EDUCATOR'S COMMENTS _____

would
I would not like to receive a copy
of the results of the survey

SIGNED_____
TITLE _____

15 Coolidge Street
Brookline, Mass.

Dear

Thank you so much for the prompt return of the post-card on which you indicated your willingness to answer a short questionnaire on the Physical Education program in your school.

I know that your situation will be of tremendous help in the compilation of data, and I appreciate the expenditure of time and consideration necessary for the completion of the enclosed questionnaire.

In the event that the questions do not adequately cover all aspects of your situation, I would be grateful for any additional comments that might aid in establishing a true picture of the program. In any case, I would appreciate any comment of any type, which you might wish to make, as you, in your educational capacity, are in the best position to judge the effect and value of Physical Education.

This survey, when completed, should be an accurate indication of the status of Physical Education in our Elementary Schools, a phase of the educational program which has been long neglected in Massachusetts. If you would be interested in receiving a copy of the results, I would be happy to send one along.

Please accept my sincere appreciation, and many thanks for your kindness and cooperation in the completion and return of this questionnaire.

Very truly yours,

(MISS) SHIRLEY E. SIMPSON
Supervisor of Physical Education
Lowell Public Schools

Boston University
School of Education
Library

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